Create Custom Color Palettes

About the preferences file

You can add as many custom palettes as you like to your **Preferences.tps** file, each with as many colors as you want. When you modify **Preferences.tps** to add colors, use the standard HTML format for the new colors (hexadecimal value #RRGGBB or Red Green Blue format). When you save the workbook and restart Tableau Desktop, the color palette names you added to **Preferences.tps** appear in the **Select Color Palette** drop-down list (Edit Color dialog). You can use a new palette like you would any other.

Tableau doesn't test or support custom color palettes, so be sure to back up your workbooks before you continue. Also, there is no guarantee that custom color palettes you create will work with future Tableau Desktop upgrades.

When you edit your **Preferences.tps** file, be sure to use straight quotation marks (' ' or " ") to delimit the palette name and type, not curly quotation marks (" " or ' ').

Edit the preferences file

The **Preferences.tps** file is located in your My Tableau Repository. The file is a basic XML file that you can open in a text editor to modify. An unedited preferences file looks like this:

```
Preferences - Notepad

File Edit Format View Help

<?xml version='1.0'?>
<workbook>
</workbook>
```

To edit your preferences file:

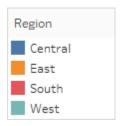
- 1. Go to the My Tableau Repository folder in your Documents directory, and open the **Preferences.tps** file.
- 2. Between the opening and closing workbook tags, insert opening and closing preferences tags.

3. Follow one of the next three procedures to create a custom color palette.

Create custom color palettes

Create a custom categorical color palette

A categorical color palette contains several distinct colors that can be assigned to discrete dimension members. For example, when you put a discrete dimension such as **Region** on the **Color** card, the categorical color legend is used.



The following is an example of what to add between the preferences tags to add a categorical color palette. Note that the type attribute is specified as regular, which identifies this palette as a categorical palette.

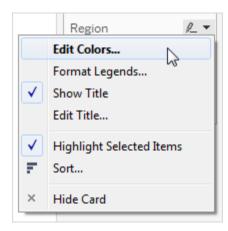
To create a custom categorical color palette:

1. In the **Preferences.tps** file, between the "preferences" tags, paste the following. Be sure to use straight quotation marks, not curly quotation marks, to delimit the palette's name and type.

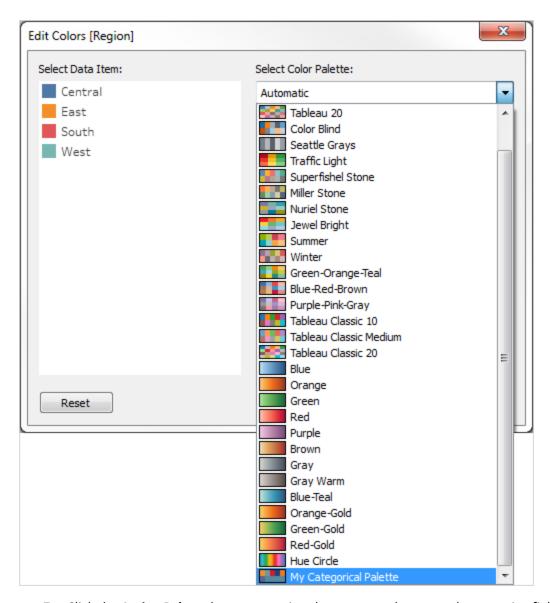
```
<color-palette name="My Categorical Palette" type="regular" > <color>#eb912b</color> <color>#7099a5</color> <color>#c71f34</color> <color>#1d437d</color> <color>#e8762b</color> <color>#5b6591</color> <color>#59879b</color> </color-palette>
```

2. Save the **Preferences.tps** file and then restart Tableau Desktop.

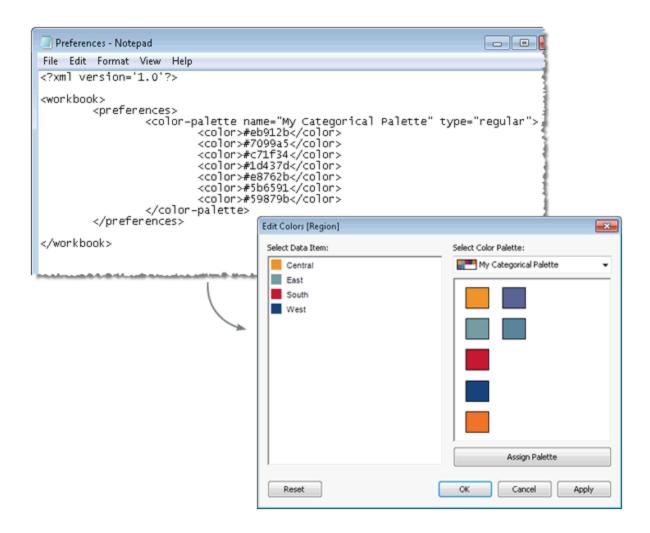
- 3. Open a data source, such as the **Superstore Sample** data source.
- 4. From the **Dimensions** pane, drag a discrete dimension, such as **Region**, to **Color**.
- 5. Click the color legend menu arrow and select **Edit Colors**.



6. In the Edit Colors dialog box, from the palette drop-down list, select your new custom palette.

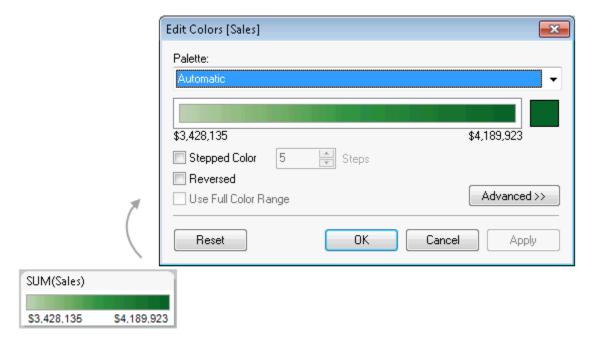


- 7. Click the **Assign Palette** button to assign the custom colors to each respective field.
- 8. Click OK.



Create a custom sequential color palette

Another type of palette is the sequential color palette. Typically, this type of palette shows a single color, varying in intensity. This type of color palette is used for continuous fields, typically for measures.



The following is an example of what to add between the preferences tags to add a sequential color palette. Note that the type attribute is specified as ordered-sequential, which identifies this palette as a sequential palette. Also, for sequential palettes you must specify at least two variants of the color in the sequential color range.

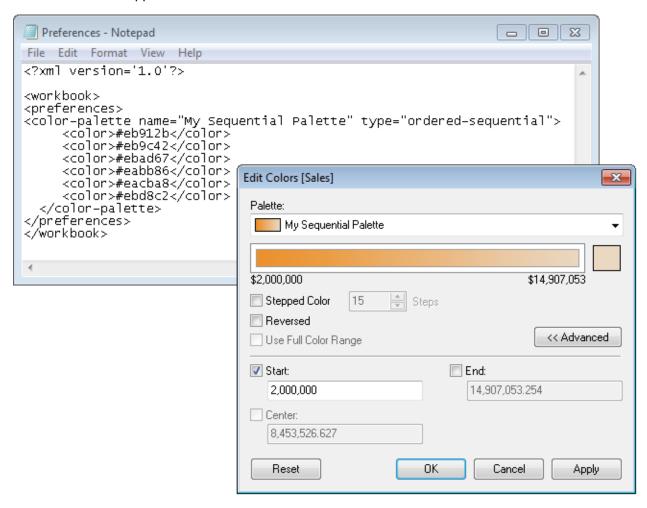
To create a custom sequential color palette:

1. In the **Preferences.tps** file, between the preferences tags, paste the following. Be sure to use straight quotation marks, not curly quotation marks, to delimit the palette's name and type.

```
<color-palette name="My Sequential Palette" type="ordered-sequential" > 
<color>#eb912b</color> 
<color>#eb9c42</color> 
<color>#ebad67</color> 
<color>#eabb86</color> 
<color>#eacba8</color> 
<color>#ebd8c2</color> 
<color>palette></color-palette></color-palette></color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</color-palette</td>
```

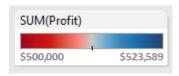
- 2. Save the **Preferences.tps** file and then restart Tableau Desktop.
- 3. Open a data source, such as the **Superstore- Sample** data source.
- 4. From the **Measures** pane, drag a measure (such as **Sales**) to **Color**.
- 5. Click the color legend menu arrow, and select **Edit Colors**.
- 6. In the Edit Colors dialog box, from the palette drop-down list, select your custom palette.
- 7. If you want each color gradation to be defined within a box, select the **Stepped Color** check box, and in the **Steps** text box, type the number of color steps you want to display in the bar.

- 8. Click the Advanced button.
- 9. Select the **Start** check box, and in the text box, type the low end number you want for the continuum.
- 10. Click the Apply button to see the result, and make adjustments as needed. The color will range from high to low intensity (or the reverse) based on the order you specify in the Preferences.tps file. The default for sequential color palettes in Tableau is to make the high end of the continuum intense and the low end pale, though selecting the Reversed check box will do the opposite.



Create a custom diverging color palette

The third type of color palette is a diverging color palette. A diverging palette shows two ranges of values using color intensity to show the magnitude of the number and the actual color to show which range the number is from. Diverging palettes are most commonly used to show the difference between positive and negative numbers.



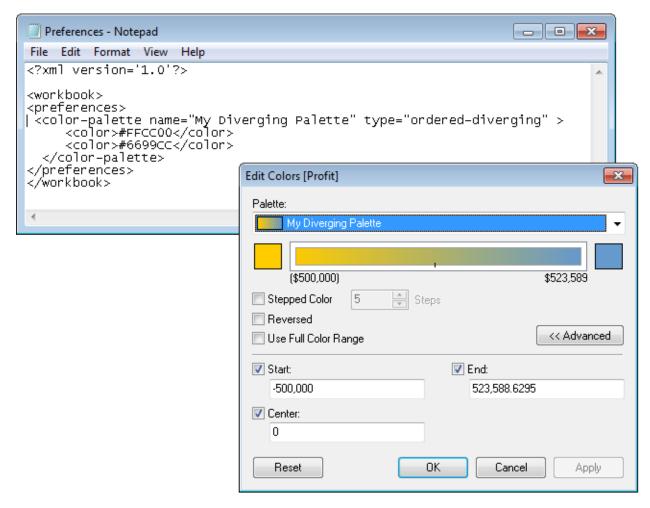
The following is an example of what to add between the preferences tags to add a diverging color palette. Note that the type attribute is specified as ordered-diverging, which identifies this palette as a diverging palette.

To create a custom diverging color palette:

1. In the **Preferences.tps** file, between the preferences tags, paste the following. Be sure to use straight quotation marks, not curly quotation marks, to delimit the palette's name and type.

<color-palette name="My Diverging Palette" type="ordered-diverging" > <color>#eb912b</color> <color>#59879b</color> </color-palette>

- 2. Save the **Preferences.tps** file and then restart Tableau Desktop.
- 3. Open a data source, such as the **Superstore Sample** data source.
- 4. Click the **Assign Palette** button. The colors in the palette are used in the order they appear in the Preferences file.



If you add a sequential or diverging palette, remember to change the "type" attribute from "regular" to one of the following:

- ordered-sequential
- ordered-diverging

(Optional): Assign a default custom palette to dimensions and measures and publish as a data source

After you save the workbook, the custom color palette information is embedded in the workbook (for Excel and text file-based workbooks, in the .twbx) and therefore only available for that workbook. This means that colors that are in use are shown for anybody opening the that particular workbook. If they don't have the modified preferences file, they can't use the color information for any new color encoding.

To allow new color encoding using the custom color palette or to standardize a custom color palette for the Tableau workbooks in your organization, you can create the custom color palette using one of the options above, and then publish it as a Tableau Server data source.

 On the same computer from which you modified the Preferences.tps file, open Tableau Desktop.

- 2. Open the **Superstore Sample** data source.
- 3. Right-click a field in the **Data** pane, and select **Default Properties > Color**.
- 4. In the Edit Colors dialog box, associate the field values with the custom color palette, and then click **OK** when finished.
- 5. From the **Data** menu, select the data source, select **Publish to Server**, and then complete process to publish the data source.

After publishing the data source to Tableau Server, connect any new workbooks to this data source to use the custom color palette.